

## SUMMARY OF INDEPENDENCE HUB PROJECT

The Independence Hub would produce gas from recent discoveries that have been made in the Eastern and Central Planning Areas by operator lead Anadarko Petroleum Company and partners that include Dominion, Kerr-McGee, Spinnaker, Devon, and Enterprise Partners L.P. The discoveries in the Eastern Planning Area include Spiderman (DeSoto Canyon Blocks 620 and 621), San Jacinto (DeSoto Canyon Block 618), Atlas Northwest (Lloyd Ridge Block 5), Atlas (DeSoto Canyon Block 50), Mondo Northwest (Lloyd Ridge Blocks 1 and 2), and Cheyenne (Lloyd Ridge Block 399). Discoveries in the Central Planning Area include Jubilee (Atwater Valley Blocks 305 and 349), Vortex (Atwater Valley Block 261), and Merganser (Atwater Valley 37). The Hub topsides would be located in Mississippi Canyon Block 920, 110 mi (177 km) southeast of the Mississippi River Delta. A steel catenary riser would connect the Hub topsides to approximately 95 mi (153 m) of 8- to 10-in-diameter (20-25 cm) flow lines from each wellhead. The Hub would be anchored to the sea bottom by 12 chain and polyester mooring lines, and has a crew of 40 people.

The peak daily production levels for Independence Hub are 850 million cubic feet of gas and 4,250 bbl of condensate. The Hub platform is designed for an operating life of 20 years and is estimated to cost approximately \$385 million. The Hub has been designed with excess capacity to tie-back as many as 10 additional fields to accommodate future discoveries in this ultra-deepwater area.

The Independence Hub project calls for the completion of 19 exploratory wells and installation of production tubing with a dynamically-positioned completion rig. Subsequent stages involve the placement on the sea bottom of flow lines and heavy stainless steel structures that control production from each well. This hardware includes a horizontal subsea production tree on each well, umbilical termination assemblies, pipeline end terminations (commonly called manifolds), umbilical lines, flow line termination sleds, and connecting jumpers.

An export pipeline from the Hub, called Independence Trail, would carry gas and condensate through a 24-in-diameter (61 cm) pipeline approximately 135 mi (217 km) to a fixed junction platform located in West Delta Block 68 in 110 ft (34 m) of water. Gas and condensate would be brought to shore from the junction platform by tie-in to the Tennessee Gas pipeline for processing at Port Sulphur, Louisiana. Well completion and Hub installation is expected to begin April 2006 with first gas expected August 2007.

The support base at Port Fourchon, Louisiana, will serve as the port of debarkation for heavy equipment, supplies, and crews for all Hub construction operations and subsequent production activity. Port Fourchon lies approximately 150 mi (241 km) northeast of Mississippi Canyon Block 920. Heliport facilities at Galliano, Louisiana, would be used for crew transport and light supplies.

The U.S. Department of the Interior's Minerals Management Service (MMS) is preparing a site-specific Environmental Assessment (SEA) for evaluation of the Hub project under the National Environmental Policy Act. The SEA will analyze the following physical and environmental resources: air and water quality, sensitive coastal resources that include barrier beaches, wetlands, and submerged seagrass communities; and sensitive offshore resources that include deepwater soft-bottom benthic communities, chemosynthetic communities, coastal and marine birds, fish and essential fish habitat, marine mammals, and sea turtles. Also considered would be socioeconomic resources such as employment and demographic trends in the impact area, commercial fisheries, recreational resources, archaeological resources, and uses of existing infrastructure.

Impact-producing factors are expected to include; facility overboard discharges, air emissions, well completion procedures, bottom disturbances, noise, visual aesthetics, oil spill hazard, support vessel transits, and whether or not any new or unusual technologies would be deployed.